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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,507	09/28/2001	Kang-Hyun Jo	678-624(P9625)	5307
28249	7590	11/18/2005	EXAMINER	
DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. UNIONDALE, NY 11553			TORRES, JUAN A	
			ART UNIT	PAPER NUMBER
			2631	

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/966,507

Applicant(s)

JO ET AL.

Examiner

Juan A. Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/03/2005 has been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification doesn't disclose controlling a transmitter portion to operate only during a transmission burst period; and controlling a radio reception portion to operate only during a reception burst period.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamane (US 5764648).

As per claim 1, Yamane discloses an apparatus for generating transmission local oscillation signals and reception local oscillation signals in a mobile terminal, comprising a first phase locked loop (PLL) block configured to generate a transmission local oscillation signal (abstract; figure 1 and figure 11A block 4; column 1 lines 15-42); a radio transmitter portion for receiving the transmission local oscillation signal (abstract; figure 1 and figure 11A block 3; column 1 lines 15-42); a second PLL block for generating a reception local oscillation signal (abstract; figure 1 and figure 11A block 5; column 1 lines 15-42); a radio reception portion for receiving the reception local oscillation signal (abstract; figure 1 and figure 11A block 6; column 1 lines 15-42); and a controller configured to control the first PLL block to operate before a minimum time period required for the first PLL block to lock up from the start point of a transmission burst period, and to control the second PLL block to operate before a minimum time period required for the second PLL block to lock up from the start point of a reception burst period to control the radio transmitter portion to operate only during a transmission burst period and to control the radio reception portion to operate only during a reception burst period (abstract; figure 1 and figure 11A block 11; figure 2; column 1 lines 15-55).

As per claim 2, Yamane discloses an apparatus for generating a transmission local oscillation signal and a reception local oscillation signal in a mobile terminal,

comprising a first PLL block configured to generate the transmission local oscillation signal (abstract; figure 1 and figure 11A block 4; column 1 lines 15-42); a radio transmitter portion for receiving the transmission local oscillation signal (abstract; figure 1 and figure 11A block 3; column 1 lines 15-42); a second PLL block configured to generate the reception local oscillation signal (abstract; figure 1 and figure 11A block 5; column 1 lines 15-42); a radio reception portion for receiving the reception local oscillation signals (abstract; figure 1 and figure 11A block 6; column 1 lines 15-42); and a controller for controlling the first PLL block to operate before an end point of a reception burst period for controlling the second PLL block to operate before an end point of a transmission burst period, for controlling the radio transmitter portion to operate only during a transmission burst period and for controlling the radio reception portion to operate only during a reception burst period (abstract; figure 1 and figure 11A block 11; figure 2; column 1 lines 15-55).

As per claim 3, Yamane discloses a method of generating a transmission local oscillation signal and a reception local oscillation signal in a mobile terminal having a first PLL block for generating the transmission local oscillation signal and a second PLL block for generating the reception local oscillation signal (abstract; figure 1 and figure 11A blocks 4 and 5; column 1 lines 15-42), comprising controlling the first PLL block to operate before a minimum time period required for the first PLL block to lock up from the start point of a transmission burst period (abstract; figure 1 and figure 11A blocks 11 and 4; column 1 lines 15-42); controlling a radio transmitter portion to operate only during a transmission burst period (abstract; figure 1 and figure 11A blocks 11 and 8;

column 1 lines 15-42); controlling the second PLL block to operate before a minimum time period required for the second PLL block to lock up from the start point of a reception burst period (abstract; figure 1 and figure 11A blocks 11 and 5; column 1 lines 15-42); and controlling a radio reception portion to operate only during a reception burst period (abstract; figure 1 and figure 11A blocks 11 and 9; column 1 lines 15-42).

As per claim 4, Yamane discloses claim 3. Yamane also discloses applying the reception local oscillation signal generated from the second PLL block to a radio receiver for the reception burst period (abstract; figure 1 and figure 11A blocks 5 and 6; column 1 lines 15-42); and applying the transmission local oscillation signal generated from the first PLL block to the radio transmitter for the transmission burst period (abstract; figure 1 and figure 11A blocks 3 and 4; column 1 lines 15-42).

As per claim 5 Yamane discloses a method of generating a transmission local oscillation signal and a reception local oscillation signal in a mobile terminal having a first PLL block for generating the transmission local oscillation signal and a second PLL block for generating the reception local oscillation signal (abstract; figure 1 and figure 11A blocks 4 and 5; column 1 lines 15-42) comprising controlling the first PLL block to operate before the end point of a reception burst period (abstract; figure 1 and figure 11A blocks 11 and 4; column 1 lines 15-42); controlling a radio transmitter portion to operate only during a transmission burst period (abstract; figure 1 and figure 11A blocks 11 and 8; column 1 lines 15-42); controlling the second PLL block to operate before the end point of a transmission burst period (abstract; figure 1 and figure 11A blocks 11 and 5; column 1 lines 15-42); and controlling a radio reception portion to operate only during

a reception burst period (abstract; figure 1 and figure 11A blocks 11 and 9; column 1 lines 15-42).

As per claim 6 Yamane discloses claim 5. Yamane also discloses applying the reception local oscillation signal generated from the second PLL block to a radio receiver for the reception burst period (abstract; figure 1 and figure 11A blocks 5 and 6; column 1 lines 15-42); and applying the transmission local oscillation signal generated from the first PLL block to a radio transmitter for the transmission burst period (abstract; figure 1 and figure 11A blocks 3 and 4; column 1 lines 15-42).

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kosiec (US 5838202 A).

As per claim 1, Kosiec discloses an apparatus for generating transmission local oscillation signals and reception local oscillation signals in a mobile terminal, comprising a first phase locked loop (PLL) block configured to generate a transmission local oscillation signal (figure 1 block 109; column 1 line 29 to column 2 line 32); a radio transmitter portion for receiving the transmission local oscillation signal (figure 1 block 105; column 1 line 29 to column 2 line 32); a second PLL block for generating a reception local oscillation signal (figure 1 block 108; column 1 line 29 to column 2 line 32); a radio reception portion for receiving the reception local oscillation signal (figure 1 block 103; column 1 line 29 to column 2 line 32); and a controller configured to control the first PLL block to operate before a minimum time period required for the first PLL block to lock up from the start point of a transmission burst period, and to control the second PLL block to operate before a minimum time period required for the second PLL

block to lock up from the start point of a reception burst period to control the radio transmitter portion to operate only during a transmission burst period and to control the radio reception portion to operate only during a reception burst period (figure 1 blocks 110 and 118; column 1 line 29 to column 2 line 32).

As per claim 2, Kosiec discloses an apparatus for generating a transmission local oscillation signal and a reception local oscillation signal in a mobile terminal, comprising a first PLL block configured to generate the transmission local oscillation signal (figure 1 block 109; column 1 line 29 to column 2 line 32); a radio transmitter portion for receiving the transmission local oscillation signal (figure 1 block 105; column 1 line 29 to column 2 line 32); a second PLL block configured to generate the reception local oscillation signal (figure 1 block 108; column 1 line 29 to column 2 line 32); a radio reception portion for receiving the reception local oscillation signals (figure 1 block 103; column 1 line 29 to column 2 line 32); and a controller for controlling the first PLL block to operate before an end point of a reception burst period for controlling the second PLL block to operate before an end point of a transmission burst period, for controlling the radio transmitter portion to operate only during a transmission burst period and for controlling the radio reception portion to operate only during a reception burst period (figure 1 blocks 110 and 118; column 1 line 29 to column 2 line 32).

As per claim 3, Kosiec discloses a method of generating a transmission local oscillation signal and a reception local oscillation signal in a mobile terminal having a first PLL block for generating the transmission local oscillation signal and a second PLL block for generating the reception local oscillation signal (figure 1 blocks 108 and 109;



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column 1 line 29 to column 2 line 32), comprising controlling the first PLL block to operate before a minimum time period required for the first PLL block to lock up from the start point of a transmission burst period (figure 1 blocks 109, 110 and 118; column 1 line 29 to column 2 line 32); controlling a radio transmitter portion to operate only during a transmission burst period (figure 1 blocks 105, 110 and 118; column 1 line 29 to column 2 line 32); controlling the second PLL block to operate before a minimum time period required for the second PLL block to lock up from the start point of a reception burst period (figure 1 blocks 108, 110 and 118; column 1 line 29 to column 2 line 32); and controlling a radio reception portion to operate only during a reception burst period (figure 1 blocks 103, 110 and 118; column 1 line 29 to column 2 line 32).

As per claim 4, Kosiec discloses claim 3. Kosiec also discloses applying the reception local oscillation signal generated from the second PLL block to a radio receiver for the reception burst period (figure 1 block 116; column 1 line 29 to column 2 line 32); and applying the transmission local oscillation signal generated from the first PLL block to the radio transmitter for the transmission burst period (figure 1 block 117; column 1 line 29 to column 2 line 32).

As per claim 5 Kosiec discloses a method of generating a transmission local oscillation signal and a reception local oscillation signal in a mobile terminal having a first PLL block for generating the transmission local oscillation signal and a second PLL block for generating the reception local oscillation signal (figure 1 blocks 108 and 109; column 1 line 29 to column 2 line 32) comprising controlling the first PLL block to operate before the end point of a reception burst period (figure 1 blocks 109, 110 and

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118; column 1 line 29 to column 2 line 32); controlling a radio transmitter portion to operate only during a transmission burst period (figure 1 blocks 105, 110 and 118; column 1 line 29 to column 2 line 32); controlling the second PLL block to operate before the end point of a transmission burst period (figure 1 blocks 108, 110 and 118; column 1 line 29 to column 2 line 32); and controlling a radio reception portion to operate only during a reception burst period (figure 1 blocks 103, 110 and 118; column 1 line 29 to column 2 line 32).

As per claim 6 Kosiec discloses claim 5. Kosiec also discloses applying the reception local oscillation signal generated from the second PLL block to a radio receiver for the reception burst period (figure 1 block 116; column 1 line 29 to column 2 line 32); and applying the transmission local oscillation signal generated from the first PLL block to a radio transmitter for the transmission burst period (figure 1 block 117; column 1 line 29 to column 2 line 32).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is (571) 272-3119. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Juan Alberto Torres  
11-14-2005

  
**KEVIN BURD**  
**PRIMARY EXAMINER**